

# abc's and 123's

The whole numbers 0 through 9 are represented by variables  $a$  through  $j$  in the clues below. Use number facts, math properties, and deductive reasoning to determine the value of each variable.

$a$	$b$	$c$	$d$	$e$	$f$	$g$	$h$	$i$	$j$

1.  $a - i = e$

2.  $b^2 = c$

3.  $e(b + g) = e \cdot b + e \cdot g = f + e = h$
4.  $e^2 = j$

5.  $d < g$

6.  $e^3 = h$

As you figure out each digit, explain what led you to that conclusion.

0

1

2

3

4

5

6

7

8

9